TECHNICAL DATA SHEET

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COEXNylex™ Unfilled Nylon 3D Printer Filament

Nylon 6 copolymer · Product code CX21 · 1.75 mm and 2.85 mm

Base resin: Nylon 6 copolymer

Typical values for the base resin. Printed parts vary with print settings, orientation and moisture content.

Physical properties

Property	Standard	Unit	Typical value
Specific gravity	ASTM D792	g/cm³	1.1

Mechanical properties

Property	Standard	Unit	Typical value
Tensile strength	ASTM D638	MPa (psi)	67 (9,720)
Tensile modulus	ASTM D638	MPa (psi)	2,000 (290,000)
Elongation at break	ASTM D638	%	4
Flexural strength	ASTM D790	MPa (psi)	63 (9,140)
Flexural modulus	ASTM D790	MPa (psi)	1,100 (160,000)
Izod impact, notched	ASTM D256	J/m (ft·lb/in)	52 (0.974)
Izod impact, unnotched	ASTM D256	J/m (ft·lb/in)	2,400 (45.0)

Thermal properties

Property	Standard	Unit	Typical value
Melting point	ASTM D648 (as stated by resin maker)	°C (°F)	195 (383)

Filament specifications

Diameter	Nominal	Minimum	Maximum	Tolerance
1.75 mm	1.75 mm (0.0689 in)	1.72 mm (0.0677 in)	1.78 mm (0.0701 in)	±0.03 mm (±0.0012 i
2.85 mm	2.85 mm (0.1122 in)	2.79 mm (0.1098 in)	2.91 mm (0.1146 in)	±0.06 mm (±0.0024 i

Recommended print settings

Nozzle temperature	245–295°C
Bed temperature	85–110°C
Part cooling fan	Not recommended
Enclosure	Required
Bed adhesion	WELD3D, PVA-based glue stick (e.g., Elmer's)
Drying	80°C for 8–12 hours
Storage	Keep sealed and dry; nylon absorbs moisture from the air

Advantages

Heat resistant, chemical resistant, strong, durable. Lightweight and incredibly strong material to make durable, functional parts.

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